



State of Tennessee

Information Systems Planning Process

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A. Introduction

In the early 1980's, the State of Tennessee recognized that the role of government was changing, that the needs for government services would continue to grow, and that resources available to government were decreasing. Effective use of information technology was viewed as a major avenue that could assist government in managing this change. It was also understood that well-defined business and information technology planning processes were critical success factors.

The State of Tennessee has developed a comprehensive technology planning process to enhance technology project initiation, review, and approval. The various players in this process are as follows:

- **Information Systems Council (ISC)**

The ISC is charged with ultimate authority over information technology within State government. The Council is comprised of the following representatives from the legislative, executive, and judicial branches of State government:

- ❖ Three members of the State Senate
- ❖ Three members of the State House of Representatives
- ❖ Comptroller of the Treasury
- ❖ Director of the Administrative Office of the Courts
- ❖ Commissioner of Finance and Administration
- ❖ Commissioner of General Services
- ❖ Commissioner of the Public Service Commission

- **Office of the Budget**

Central budget authority for State government.

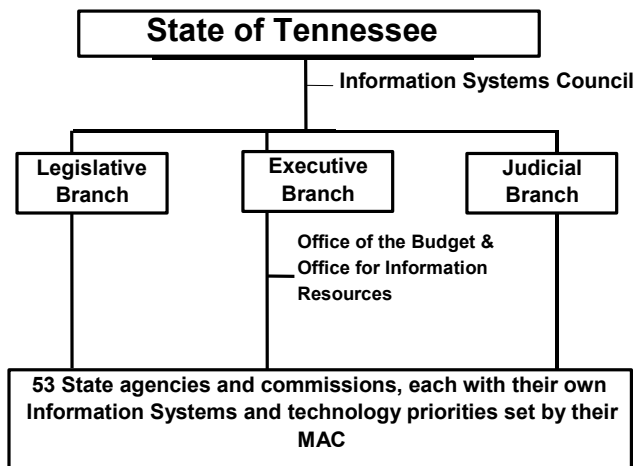
- **Office for Information Resources (OIR)**

Central technology authority for State government.

- **Management Advisory Committee (MAC)**

MACs were established within each agency as a part of the planning process to enable executive management to more effectively direct information technology activities. The typical MAC is chaired by the Deputy Executive Officer of the agency, with program/functional area executives as

MAC members. Some agencies include their General Council, Chief Financial Officer, or Internal Auditor on the MAC. Agency IS Directors are staff to the MAC. The MAC is accountable directly to the Commissioner or agency head.



The information systems planning process in Tennessee, which has been in operation since 1981, involves the preparation and agency authorization of the Information Systems Plans (ISP), review by the central administrative agency, and final authorization by the major directing body for technology within Tennessee State government.

B. Strategic Business Planning

In the fall of 1997, the Governor and the Commissioner of Finance and Administration initiated a Strategic Business Planning effort for the Executive Branch agencies of State government. The Center for Effective Government, within the Department of Finance and Administration, is responsible for coordinating strategic business planning. Each year, the Governor and his Cabinet formulate the overall State Strategic Plan. Each agency in the Executive Branch develops their agency Strategic Business Plan based on the goals and objectives of the State Strategic Plan.

C. Strategic Information Technology Planning

In 1998, the State established a formal Strategic Information Technology Planning Process. Input to this IT planning effort comes from the State Strategic Business Plan, agency Information Systems Plans, and technology trends in the marketplace. The State's IT Strategic Plan can be found at: www.state.tn.us/finance/oir/strategic.html

D. Agency Information Systems Planning

Each agency in Tennessee develops an Information Systems Plan (ISP) which is due at the beginning of the fiscal year (July 1) and covers a three-year planning horizon. Year One identifies projects for the current fiscal year for which funding is already in place. Year Two covers the next fiscal year where funding for these initiatives will be requested in the budget submitted in October of the current fiscal year. Year Three covers future projects. Development of the agency's ISP is a cooperative effort between executive management, business staff, and Information Systems staff. Agency executive management and business staff, with Information Systems staff assistance, perform the following activities:

- ❖ Review of the strategic business plan for the agency, including the statement of mission, goals, objectives, and strategies that set business direction.
- ❖ Assessment of the current technological environment within the agency, including evaluation of the primary hardware, application software, and connectivity.
- ❖ Development of an Information Technology Strategy based upon the analysis of the current environment and the business goals to be achieved. This strategy identifies the agency's short and long-range goals related to managing and sharing information and information technology in support of the agency's business strategic plan. The strategy also addresses agency technology weaknesses and needs.

Information technology projects are identified and documented in the ISP in support of the Information Technology Strategy. These projects may include traditional application development or acquisition projects, as well as projects involving specific technologies including voice response systems, geographic information systems, and communication infrastructure projects. Each project with initial costs over \$100,000 is described in a Project Proposal which addresses the business process to be impacted by the project and specifies the business strategy or objectives supported by the project. A Cost Benefit Analysis document is also included to detail the costs, benefits, risks, and funding sources for the project. The Project Proposal and Cost Benefit Analysis provide a framework for an agency's executive management to evaluate and prioritize proposed projects, as well as provide a mechanism to monitor costs and benefits during project implementation. These documents also provide executive management in State government with the information needed to understand the business impact to the State, prioritize projects on a statewide basis, and recommend funding.

The Information Systems Plans are reviewed and authorized by Management Advisory Committees (MACs) within each agency. Management Advisory Committees perform the following functions:

1. Sets the information technology agenda as an adjunct to the development of the business strategy for the agency.
2. Ensures that the agency information technology strategy is carried out and that projects are appropriately targeted to support specific business strategies.
3. Reviews the cost assumptions and benefit estimates in order to approve submission of the project.
4. Sets priorities for a project in relation to other projects within the agency competing for resources.
5. Ensures that authorized projects meet targets established in the project proposal and cost benefit analysis.
6. Ensures that technology projects are in line with business needs and direction.
7. Authorizes the Information Systems Plan and the technology projects contained therein.

E. Information Systems Plan Review

External review of the Information Technology Strategy and supporting projects begins upon submission of the Information Systems Plans to the Office for Information Resources. The Tennessee Department of Finance and Administration houses the State Budget Office and the Office for Information Resources (OIR). The State Budget Office oversees development and management of the Budget for all of State government, and the Office for Information Resources (OIR) oversees information technology for all of State government. Representatives from these organizations serve on a review group, the OIR/Budget Review Committee (ORC), which has the responsibility to address information systems issues from a statewide (corporate) view, to take a strategic view on major technological issues, and to provide a process for monitoring technology projects. The review of Information Systems Plans is an important step in the accomplishment of these responsibilities. There are multiple purposes for plan review, including:

- Approval or disapproval of current projects based on support of the State and Agency Strategic Plan and resource availability; adherence to the State's information systems architecture, policies and procedures; and contribution to fulfillment of the State's service delivery to its citizens.
- Recommendation of projects for inclusion or exclusion in funding formulas for the next fiscal year.
- Review of future projects in an attempt to identify long-term needs for information technology resources.
- Review of the Information Technology Strategy in an attempt to evaluate the agency's approach in using information technology to enable and enhance service delivery as outlined in its Business Strategy.
- Review of the plan to develop an understanding of the issues related to the effective and efficient use of information technology in the agency and the State as a whole. This information is important to identifying issues that not only affect the agency but also the systems community in the State. In its role as staff to the Information Systems Council, OIR is then better positioned to help pursue strategic initiatives to address major issues.
- Overall view of projects across agencies which may be performing similar functions, generating redundant data, or demonstrating a need for sharing data or resources. This view assists the State in addressing a growing need for sharing data among agencies in order to facilitate better service to the citizens of the State.

The ORC is made up of the following staff:

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|---|---|
| <input type="checkbox"/> Director of Systems Development and Support in OIR | <input type="checkbox"/> Director of Planning, Research, and Development in OIR |
| <input type="checkbox"/> Director of Fiscal Support in OIR | <input type="checkbox"/> Director of Telecommunications in OIR |
| <input type="checkbox"/> Director of Quality Assurance in OIR | <input type="checkbox"/> Budget Coordinator in the Budget Office |
| <input type="checkbox"/> Director of Technology in OIR | |

The ORC plan review begins each year when the Information Systems Plans are submitted on July 1st. The plans, as well as reviewer comments about the plans and each major project, are shared electronically. Approximately 55 staff members from the various divisions within OIR and Budget read and comment about the plans and/or projects. ORC members complete a review of each ISP, as well as a review of comments provided by other staff. The actions by the agency's Management Advisory Committee in defining and setting project priorities also helps ORC understand the relative importance of each project in the further prioritization and ranking of all project requests throughout State government.

After ORC preliminary review, an agenda detailing issues of concern to individual agencies is prepared. A formal meeting is held by ORC with each agency's MAC and IS staff to address the issues identified. After the formal meeting, the agency is provided disposition on their Plan and each project in the Plan.

Funding considerations based on the ORC disposition of projects are finalized, and the Statewide agency initiatives are presented to the Information Systems Council. The Council makes the final disposition on major projects and initiatives for State government.

After ORC review and disposition, a Statewide Information Systems Plan is developed based upon individual agency plans. The Statewide Information Systems Plan, which can be viewed at www.state.tn.us/finance/oir/prd/tennplan.html, consists of the following segments:

- Description of the Information Technology Environment on an enterprise basis, including details about planning initiatives and the technical environment.
- Overview of agency business objectives, technology strategies, and technology projects.
- Overview of the information technology organizational infrastructure.

F. Government Operation Improvements

The operation of State government has improved in three general areas directly related to the Information Systems Planning process:

1. improvements in the way agencies determine and direct information technology projects,
2. improvements in the Statewide technology and fiscal review of projects, and
3. significant improvements in overall information technology planning.

➤ Improvements Within Agencies

Individual projects are now more clearly defined due to the standardization of a comprehensive project planning format as required by the Project Proposal and Cost Benefit Analysis methodology. Anticipated review of these deliverables within the agency and outside the agency increases the accuracy of the descriptions and estimates. Project sponsors, as well as MAC members, are encouraged to be closely involved in the cost benefit analysis process. Their role as the responsible parties has been crucial for ensuring that business objectives are met by projects within the estimated costs and with the specified benefits.

Individual projects are now part of an overall technology strategy that moves the agency toward defined goals. The goals to be supported are part of the agency's business strategy. The closer link between the technology and the business enhances the visibility of information technology initiatives that are usually costly in dollars and manpower resources.

Management overview and direction of the information technology strategy and supporting projects is emphasized due to the nature of the need for technology strategies to support the business initiatives of the agency. Business management's key role in the development of the information technology strategy aids in ensuring that technology projects are more likely to be supported with the needed resources.

Technology advancement relies on an agency business strategy. The development of agency business strategies has accelerated due to this dependence.

➤ **Statewide Technology and Fiscal Review**

The explicit statement of the business need driving technology projects, as well as the definition of the project and associated costs and benefits, improves the understanding of the need for the project outside of the agency. A more objective review of all information technology projects can take place. Approvals and prioritization are based on more factual data and less on subjective issues.

➤ **Improvements in Overall Technology Planning**

Through the plan review process, an enterprise-wide view is obtained so that initiatives can be viewed as State initiatives rather than agency initiatives. Resource maximization can take place through this view of similar, cooperative projects. Efforts can be more coordinated across agencies. Conformance of information technology initiatives to Statewide architectural standards is more readily encouraged and achieved.

G. Benefits of Information Systems Planning

As the process of initiating, approving, and monitoring projects has been formalized and directly tied to the business strategies of the State, an atmosphere has been fostered to encourage cost effective technology solutions to service delivery challenges for State government. The effective and efficient use of resources expended on technologies, the close management control over the projects, and the benefits in citizen service have fostered the expanded use of information technology. Information technology in all of State government is driven by business goals established by the elected representatives of the citizens of the State. Executive management is accountable for technology initiatives. More realistic technology projects are defined and evaluated on a more objective basis.

The impact of more effective planning is difficult to measure; however, there is no doubt that business and information technology planning has enabled significant progress in the operation of State government. One indicator of that progress and effectiveness is national recognition of our accomplishments. Tennessee has been honored with the following:

- "The Best Managed State in the Country" by one national publication, and "One of the Best Managed States" by another publication, and the only state to make the top five in both,
- "One of the Top 100 organizations among both private and public sector organizations by CIO Magazine",
- "The first and only state to receive ALL three Government Finance Officers Association (GFOA) awards of excellence and information systems that have been awarded the NASIRE and Smithsonian, and
- One of the top six states in the nation for effective management of information technology. (Study conducted by Syracuse University, "*Governing*" and "*Government Executive*" magazines.)

H. Innovative Funding Mechanisms

As the State has adopted technology to enhance service to citizens, IT projects that require significant investment have increased in number and cost. In support of this effort, the State has established a fund, called the Systems Development Fund, as a mechanism for funding large application development projects and for large equipment purchases. State agencies can request funding from the Systems Development Fund to cover initial investment and pay back the funds over a three to five-year timeframe. Projects approved for expenditure from this fund are determined by the Information Systems Council based on the recommendation of the Commissioner of F & A.